

Project Code: 06-HRC-WU12-SE90 Location: Horticulture Research Center

Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Carbondale IL 62901 USA
 Trial Status: Final Updated: 8-4-06

Objective:

Evaluate of oil adjuvants for control of Roundup Ready Corn and other weeds in Roundup Ready Soybean with glyphosate and clethodim.

Weed Code	Common Name	Scientific Name
1.	ZEAMX corn, volunteer	Zea mays L.
2.	AMATA waterhemp, common	Amaranthus rudis Sauer

Crop 1:	GLXMA soybean	Variety:	P94M80 RR
Planting Method:	Seeded	Planting Date:	6-5-06
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	30 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2005				

Texture:	Silt loam	% OM:	2.8	pH:	6.7	CEC:	10
		Fert. Level:	P1: 92 LB/A, K: 334 LB/A				

APPLICATION DESCRIPTION

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Application Date: 6-29-06
 Time of Day: 19:30
 Application Method: Spray
 Application Timing: 12-18"CN
 Applic. Placement: BROFOL
 Air Temp., Unit: 79 F
 % Relative Humidity: 94
 Wind Velocity, Unit: 1 MPH
 Dew Presence (Y/N): N
 Soil Moisture: NORMAL
 % Cloud Cover: 0

CROP STAGE AT EACH APPLICATION

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Crop 1 Code, Stage: GLXMA V3
 Height, Unit: 8-9 IN

WEED STAGE AT EACH APPLICATION

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Weed 1 Code: ZEAMX
 Stage (leaves): 5-7
 Height (inches): 11-15
 Density: Medium

Weed 2 Code: AMATA
 Stage (leaves): 5-18
 Height (inches): 4-9
 Density: High

APPLICATION EQUIPMENT

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Appl. Equipment: CO2 sprayer
 Operating Pressure: 40 PSI
 Nozzle Type: Flat fan
 Nozzle Size: 8002
 Boom Length, Unit: 7.5 FT
 Spray Volume, Unit: 15 GPA

NOTES:

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Weed Code										ZEAMX	ZEAMX	AMATA	AMATA		
Crop Code										GLXMA	GLXMA				
Rating Data Type										Injury	Injury	Control	Control		
Rating Unit										Percent	Percent	Percent	Percent		
Rating Date										7-13-06	7-27-06	7-13-06	7-27-06		
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-A	28 DA-A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	25	18		
1	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			25	23		
2	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	52	50		
2	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			52	50		
2	N-PAK AMS	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			38	50		
3	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	53	63		
3	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			53	63		
3	ALLIANCE	100	LIQ	1.25	% v/v	10	pt/100 gal	12-18"CN	A			43	55		
4	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	63	85		
4	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			63	85		
4	DESTINY MSO	100	LIQ	1.0	% v/v	8	pt/100 gal	12-18"CN	A			40	47		
4	N-PAK AMS	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			40	47		
5	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	62	80		
5	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			62	80		
5	PREFERENCE	100	LIQ	0.25	% v/v	2	pt/100 gal	12-18"CN	A			33	43		
5	N-PAK AMS	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			33	43		
6	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	67	80		
6	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			67	80		
6	SUPERB HC	100	LIQ	0.5	% v/v	4	pt/100 gal	12-18"CN	A			38	48		
6	N-PAK AMS	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			38	48		
7	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	67	77		
7	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			67	77		
7	SUPERB HC	100	LIQ	0.5	% v/v	4	pt/100 gal	12-18"CN	A			40	45		
7	ALLIANCE	100	LIQ	1.25	% v/v	10	pt/100 gal	12-18"CN	A			40	45		
8	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	73	92		
8	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			73	92		
8	AG 05055	100	LIQ	1.5	% v/v	12	pt/100 gal	12-18"CN	A			38	43		
9	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	68	97		
9	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			68	97		
9	AG 05055	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			42	47		
10	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	65	82		
10	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			65	82		
10	AG 05006	100	LIQ	0.5	% v/v	4	pt/100 gal	12-18"CN	A			38	55		
10	N-PAK AMS	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			38	55		
11	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	63	85		
11	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			63	85		
11	AG 05006	100	LIQ	0.5	% v/v	4	pt/100 gal	12-18"CN	A			42	52		
11	ALLIANCE	100	LIQ	1.25	% v/v	10	pt/100 gal	12-18"CN	A			42	52		
12	ROUNDUP W-MAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	12-18"CN	A	0	0	72	93		
12	SELECT	2	EC	0.0312	lb ai/a	2	fl oz/a	12-18"CN	A			72	93		
12	AG 03002	100	LIQ	2.5	% v/v	20	pt/100 gal	12-18"CN	A			38	45		
13	NONTREATED									0	0	0	0		
LSD (P=.05)										0.0	0.0	6.7	7.9	5.6	7.6
Replicate F										0.000	0.000	1.087	3.001	3.903	0.794
Replicate Prob(F)										1.0000	1.0000	0.3532	0.0687	0.0341	0.4637
Treatment F										0.000	0.000	82.745	120.995	36.155	33.540
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Trial Comments

1. Protocol: Agrilience.
2. Ratings: CI/WC 14 + 28 DAT.
3. Roundup Ready corn planted in 30 inch rows perpendicular to soybean rows.
4. DA-A = Days after 12-18"CN application.
5. Not harvested.